

## PHENIX WEEKLY PLANNING

11/16/06 Don Lynch



PHENIX

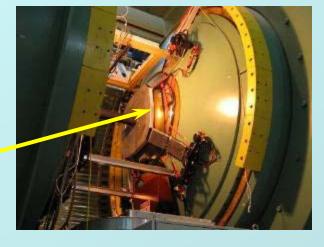
Technical Support 2006

## The Commission of the Commissi

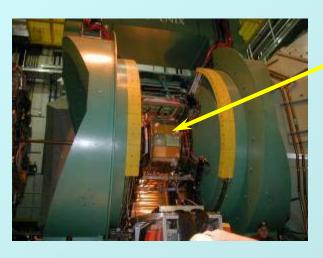
#### New Detectors



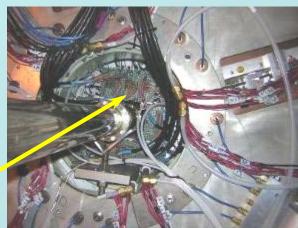
TOF West



**RXNP** 



HBD



MPC North



#### New Gas Systems

HBD and TOF W gas flow control systems are done.





HBD gas monitoring system installation ongoing





#### HBD Signal Rack

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Cabling Done















## HBD (Hadron Blow Drier) Electronics Cooling

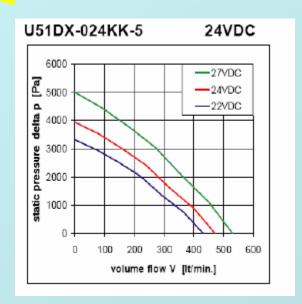


Order in Process,

Finally! Rec. ~ 2 weeks?

#### Still Needed for Approval to Operate:

- Where will fan(s) be mounted? CM base "cubby hole" fan model and specs to be forwarded to Safety
- Written design and operation description and- To be forwarded to Safety
- Order for 5 blowers & drivers (4 +1 spare) is in the works



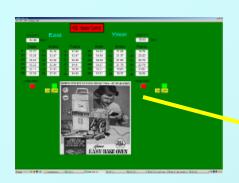
Blower requirements:

5 cfm (142 l/min)

@ 5 in WC (1245 Pa)



#### HBD "EBO" Heaters











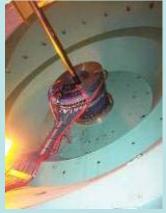
#### Subsystem Maintenance & Repairs

#### EMCal West & East Done

- Technica DC HV/LV patch panel upgrade & wire repair Done
  - MPC South repaired
- BBC South & North repairs done
  - MuTr grounding problems Fixed
- MuTr North and South HV/FEE
  - troubleshooting ~ Done..Dry air
  - distribution balancing ongoing
- RICH light leak ~
  - PC HV module/cable maintenance
  - done
- TEC upgrades done
  - MuID survey DONE!
- Support 2006 MuID commissioning next month after flammable gas is on







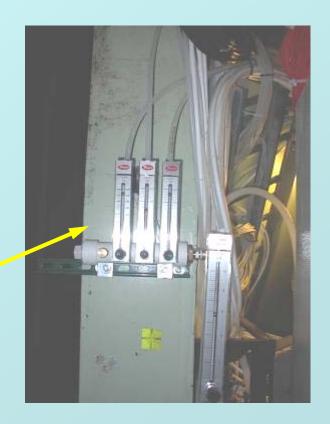


## MuTr Dry Air Flow Distribution Upgrade



MuTr South Flow Controls

MuTr North Flow Controls





## Tech n i P r

#### Infrastructure Work

#### CAD/RHIC PHENIX infrastucture related mechanical and electrical support

Roof leak repairs

MuID survey

Door Latch maintenance for security

Metals Dumpster

Run 7 prep support



Done
Requested
Requested
On-going





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Support 2006

#### Remaining Schedule

TOF West, RXN
Electronic
HBD
HBD dryin
HBD pream
(tem
Electronic
MuID survey
MuID commiss

TOF West, RXNP, MPC N
Electronics Installation/Commissioning
1BD
HBD drying heater system commissioning
HBD preamp cooling system
(temporary LN2 system in-place)
Electronics Installation/Commissioning
MuID survey
MuID commissioning

Start	Complete
in progress	11/30/06
10/25/06	11/15/06
10/1/06	11/30/06
11/1/06	11/30/06
Done	Done
12/11/06	12/18/06





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### Remaining Schedule (cont'd)

Start	Complete
Started	20-Nov
20-Nov	21-Nov
20-Nov	30-Nov
1-Dec	1-Dec
5-Dec	5-Dec
5-Dec	18-Dec
8-Dec	8-Dec
18-Dec	18-Dec
25-Dec	25-Dec
25-Dec	31-Dec
1-Jan	1-Jan



**Pink Sheeting & Blue Sheeting** 

Move MMS full North/Install beam pipe collar

**Rebuild Rolling door** 

**Close rolling door** 

**Start Flammable Gas Flow** 

**All Up Commissioning** 

**RHIC Cooldown Begins** 

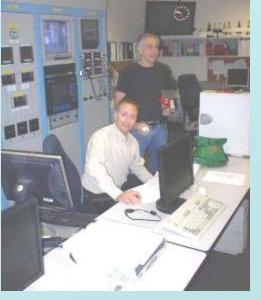
Beam in yellow ring

Beam in blue ring

RHIC beam conditioning

Shutdown Concluded/Start of Physics Run



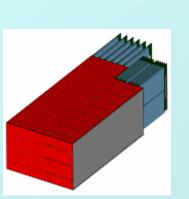


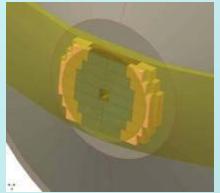


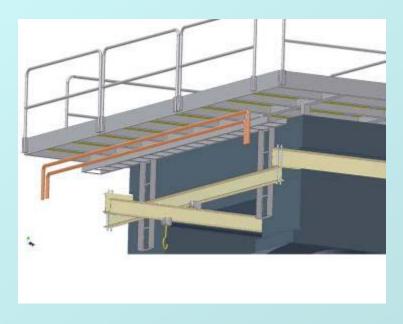
#### Looking Ahead

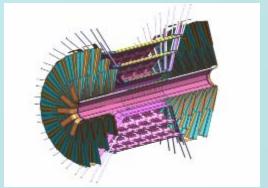
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cWhat's up for next year and beyond hnica

- New CM Crane
- New Beam pipe design
- Muon RPC trigger design
- VTX/FVTX design
- NCC design
- MuTr upgrade?
- Infrastructure improvements









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#### SEU Test John Lajoie Iowa State

#### Experimental Impact Statement

- The box dimensions are:  $17'' \times 10'' \times 3.5''$ .
- The only services required by the box in order to function are AC power and a Cat5 cable connected to the USB interface.
- The FPGA devices will be programmed and monitored over an external USB connection, which is run over a USB -> Cat5 extender box. This extender has a maximum range of 150 feet of Cat5 cable, which should be sufficient to reach from the PHENIX IR to the rack room, where it will connect to a laptop containing the analysis and configuration software. (The laptop will require network access, and will comply fully with all BNL cybersecurity requirements.)
- Because SEU events are relatively rare, it would be best to expose the apparatus to as high a particle flux as possible. However, the box represents a substantial amount of material and it would be unacceptable to place the box within the acceptance of the central arms. Placement within one of the muon arms, near or on the central magnet pole, would be optimal.



#### SEU Test John Lajoie Iowa State

## Technical S u P Port 2 0

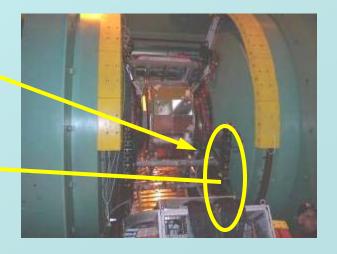


One box sent, 2 boxes arrived. 2<sup>nd</sup> box contains USB repeater /extender. Box has steel brackets XX Replace brackets find home for 2<sup>nd</sup> box.





Current proposed location for test box. To be oriented with long side of box perpendicular to ebeam orbit direction (z).





#### PHENIX Annual Safety Review Follow Up

- No major problems/no critical action items
- Provide as-built drawings and procedures for new gas systems (TOF W and HBD)
- Provide documentation on carpet runner/bridge floor barrier to J. Levesque for reviw (DONE - Approved)
- · Comprehensive review of PHENIX procedures, revise where necessary, retire where appropriate



#### Next Week

- · Finish white sheets/ blue sheets
- HBD, TOF W, RXNP, MPC N electronics commissioning
- PHENIX Procedure review
- Thanksgiving Holiday
- · Black Friday Go shopping!





## Where To Find PHENIX Technical Info



Links for the weekly planning meeting slides, long term planning, pictures, videos and other technical info can be found on the web site:

http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL\_SSint-page.htm